

PRELIMINARY AND SHORT REPORTS

ERYTHROMYCIN OINTMENT IN THE TREATMENT OF THE PYODERMAS*

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Erythromycin, a new antibiotic, is produced by *Streptomyces erythreus* when grown on artificial media. Initial reports (1) suggest that it is of value on oral administration in the treatment of streptococcal follicular tonsillitis, and of staphylococcal septicemia.

This is a preliminary report on the treatment of pyogenic infections of the skin with erythromycin ointment.

PATIENTS STUDIED

This report comprises our observations on seventy patients with various dermatoses treated with 1% erythromycin ointment. Forty-seven of these had one of the primary pyodermas; twenty-three had a dermatosis, complicated by a secondary pyogenic infection. Cultures made from the purulent discharges from these various lesions revealed *Staphylococcus Aureus*, hemolytic *Staphylococcus Aureus*, hemolytic *Staphylococcus Albus* and beta hemolytic *Streptococcus*. Patients ranged in age from two months to sixty years.

PREPARATION USED

A one per cent ointment of erythromycin was prepared in a base consisting of petrolatum with 5% heavy mineral oil.

METHOD OF TREATMENT

Patients were instructed to remove the crusts or surface exudates with warm water twice daily prior to the application of the ointment.

RESULTS OF TREATMENT

Treatment of pyodermas Chart I

Patients with impetigo contagiosa and ecthyma showed a prompt response to treatment with erythromycin ointment. The lesions of impetigo contagiosa healed completely in from three to nine days, depending on the severity of the lesions. Ecthymata healed in from seven to fourteen days, depending on the severity of the condition and the depth of the ulcers. Four cases of sycosis vulgaris were treated; involution of the lesions was complete in three patients in from nine to fourteen days, and in the fourth patient all lesions had disappeared in thirty one days. There were no failures in three cases of purulent paronychia.

Conditions other than pyodermas complicated by secondary infection Chart II

Twenty three patients had dermatoses in which the secondary infection was eradicated in from four to twenty one days by the local application of 1% erythromycin ointment. The ointment had no beneficial effect on the basic condition.

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Adverse reaction to the local application

One patient with a stasis ulcer complained of a burning pain due to the application of the ointment. No other adverse reactions were noted. None of the patients in this series developed any manifestation of contact-type sensitivity to erythromycin ointment.

LOCAL APPLICATION OF ERYTHROMYCIN OINTMENT—CHART I

Treatment of pyodermas

DIAGNOSIS	NUMBER OF CASES	SHORTEST TREATMENT TIME TO HEAL LESIONS	LONGEST TREATMENT TIME TO HEAL LESIONS	ADVERSE REACTIONS	FAILURES
		<i>days</i>	<i>days</i>		
Impetigo contagiosa.....	25	3	9	0	0
Ecthyma.....	15	7	14	0	0
Sycosis vulgaris.....	4	9	31	0	0
Paronychia.....	3	7	14	0	1

LOCAL APPLICATION OF ERYTHROMYCIN OINTMENT—CHART II

Treatment of dermatoses complicated by pyogenic infection

DIAGNOSIS	NO. OF CASES	TIME NECESSARY TO ERADICATE SECONDARY INFECTION		ADVERSE REACTION	FAILURE
		Shortest time	Longest time		
		<i>days</i>	<i>days</i>		
Infected atopic dermatitis.....	4	5	21	0	0
Infected eczematous dermatitis.....	4	4	10	0	0
Infected contact dermatitis.....	5	5	14	0	0
Infected stasis eczema.....	2	7	9	0	0
Infected stasis ulcer.....	2	7	7	1	0
				burning	
Infected biopsy wound.....	1	7	7	0	0
Infected seborrheic dermatitis.....	4	7	12	0	0
Infected dermatophytosis.....	1	10	10	0	0

CONCLUSION

1. Seventy patients with various dermatoses were treated with 1% erythromycin ointment. Forty seven cases had a primary pyoderma, twenty three had other dermatoses complicated by secondary pyogenic infection.

2. One per cent erythromycin ointment caused rapid involution of the pyodermas.

3. One per cent erythromycin ointment caused rapid eradication of secondary pyogenic infection complicating dermatoses but had no beneficial effect on the primary eruption.

4. No reactions of sensitivity due to 1% erythromycin ointment were encountered in this series.

REFERENCES

1. HEILMAN, F. R., HERRELL, W. E., WELLMAN, W. E. AND GERACI, J. E.: Some laboratory and clinical observations on a new antibiotic, Erythromycin (Ilotycin), Proc. Staff Meet. Mayo Clin., 27: 285, 1952.